



May 15, 2014

Dear Customer:

The purpose for this letter is to inform you of our response to the FAA Special Airworthiness Information Bulletin SAIB:HQ-14-16 dated April 24, 2014, which addresses the issue of hydrogen embrittlement in certain aerospace parts.

Wesco has been engaged with the FAA on this issue and, in conjunction with AIA¹ and the NASC² working group, has conducted an investigation of hydrogen embrittlement as an industry-wide concern and, specifically, the potential for hydrogen embrittlement in the parts that we sell. Wesco was selected by AIA to chair a working group committee to address the quality of industry standards generally, and the issue of hydrogen embrittlement in particular. More recently, Wesco has been engaged in meetings with EASA, the FAA³, OEMs and other manufacturers discussing how best to identify the root cause and potential proliferation of hydrogen embrittlement and an appropriate industry response to this issue. Wesco is committed to finding the most efficient and effective way of assuring that our customers continue to receive quality products.

As a part of our review, Wesco conducted extensive testing of suspect products to determine the potential for hydrogen embrittlement in the parts we sell. Wesco's testing protocols concluded that there are no systemic issues within Wesco's products. On an industry scale, the risk of hydrogen embrittlement remains fairly low. Millions of nuts have been manufactured and shipped with only a handful of parts having been found to be affected. Even though the number of failures is low (with a calculation of >5.5 Sigma or a quality rating of 99.9968%) after the release of the EASA Safety Information Bulletin Wesco began its due diligence on this issue by removing any suspect material from our inventories and returning those materials to the corresponding manufacturers. In addition, all remaining non-suspect nuts were subjected to torque testing⁴. Wesco was unable to duplicate failures and all lots passed such tests. In addition to the Procurement Spec, Wesco performed additional torque testing on the suspect lots at a higher threshold, with a 15 degree wedge, and was still unable to duplicate failures.

Wesco has confidence that the parts we sell will perform pursuant to specifications. However, if you would like to perform further testing, Wesco is available to assist. If you are interested in scheduling testing, please contact your Wesco account manager. The manager can provide you with a price quote and an expedited testing process so as to avoid disrupting your production. Please take into account that **torque testing requires 7 days**.

If you have any questions, please contact the undersigned.

Thank you and regards,

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¹ Aerospace Industry Association

² National Aerospace Standards Committee

³ Federal Aviation Administration

⁴ Torque testing was performed on several lots of different sizes of the alloy steel MS21042 series per Procurement Spec "NASM25027 Nut, Self-Locking, 250°F, 450°F and 800°F", which directs you to "NASM1312-31 Fasteners, Test Methods, Method 31".